

Notice of Allowability

Application No.

10/681,117

Applicant(s)

MIYAHARA ET AL.

Examiner

John P. Sheehan

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1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 13-32.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

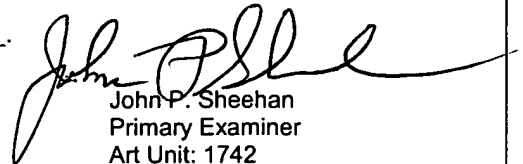
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 10/9/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 12/19/2005.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.


John P. Sheehan
Primary Examiner
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**EXAMINER'S COMMENTS, EXAMINER'S AMENDMENT AND REASONS FOR
ALLOWANCE**

Preliminary Amendment Submitted January 23, 2004

1. It noted that in the preliminary amendment submitted January 23, 2004, the first preliminary amendment directed to the claims, claims 13, 16, 19 and 22 are labeled as "Currently Amended" while claims 14, 15, 17, 18, 20, 21, 23 and 24 are labeled as "Previously Presented" and claims 25 to 32 are labeled as "New". However, none of claims 13 to 24 had appeared in the application prior to this preliminary amendment. Accordingly, all of the claims appearing in this preliminary amendment, claims 13 to 32 should have been labeled as "New". The Examiner has acted on this case with this understanding. If this is not satisfactory to the applicants, the applicants should notify the Examiner.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Peter Skiff on December 19, 2005.

The application has been amended as follows:

- I. In claims 14, line 1, "1" has been deleted and -13—has been inserted.
- II. In claims 15, line 1, "1" has been deleted and -13—has been inserted.
- III. In claims 17, line 1, "4" has been deleted and -16—has been inserted.
- IV. In claims 18, line 1, "4" has been deleted and -16—has been inserted.
- V. In claims 20, line 1, "7" has been deleted and -19—has been inserted.
- VI. In claims 21, line 1, "7" has been deleted and -19—has been inserted.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: None of the references alone or in combination teach or suggest a method of heat treating a Ni-base alloy tube:

- i) at a temperature of 650 to 1200⁰C;
- ii) for 1 to 1200 minutes'
- iii) in a supplied atmosphere consisting of hydrogen or a mixed gas of hydrogen and argon having a dew point of -60⁰C to +20⁰C;
- wherein
- iv) prior to putting the tube into the continuous heat treatment furnace, the atmospheric gas is supplied into the tube from the front end of the tube moving direction by use of a gas supplying devices.

It is noted that Anada et al. (Anada '528, US Patent 6,482,528, cited in the IDS submitted October 9, 2003) and JP 2002-121630 (Anada '630, cited in the IDS submitted October 9, 2003) each teach heat treating a Ni-base alloy tube:

- i) at a temperature of 650 to 1200°C;
- ii) for 1 to 1200 minutes'
- iii) in a supplied atmosphere consisting of hydrogen or a mixed gas of hydrogen and argon having a dew point of -60°C to +20°C.

However, neither Anada '528 nor Anada '630 nor any of the prior art references alone or in combination teach or suggest the additional process step of;

- iv) prior to putting the tube into the continuous heat treatment furnace, the atmospheric gas is supplied into the tube from the front end of the tube moving direction by use of a gas supplying devices;

in combination with i) – iii) nor the unexpected improved results, i.e., the reduction in the amount of Ni released from the nickel tubes resulting from a combination of i) – iv) as demonstrated in Table 2 of the specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571)

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272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John P. Sheehan
Primary Examiner
Art Unit 1742

jps